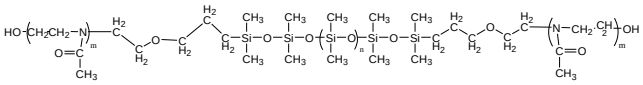
Sample Name:
Poly(2-methyloxazoline-b-dimethylsiloxane-b-2-methyloxazoline) Triblock Copolymer
Sample #: **P18241B-MOXZDMSMOXZ**

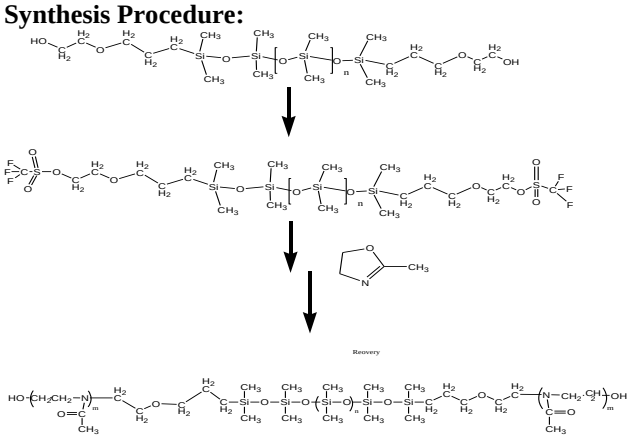
Structure:



Composition:

Mn x 10^3 MEOXZ-DMS-MEOXZ	PDI
7.2-b-3.0-b-b-7.2	1.35
Dp: 85-b-40-b-85	

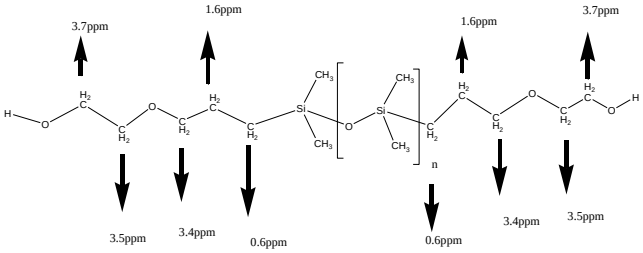
Synthesis Procedure:

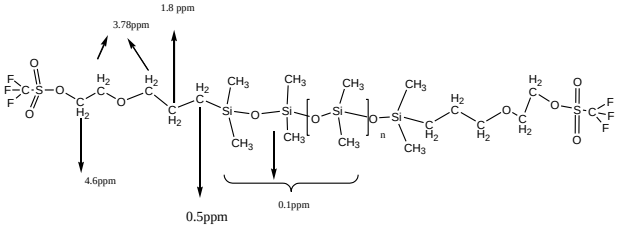


Characterization:

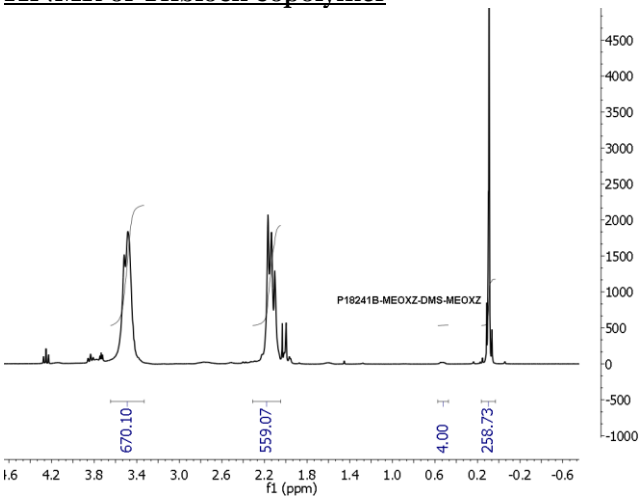
Size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and refractive detector. SEC columns from Supelco were used with THF and for the block copolymer in DMF as the eluent. The columns were calibrated with monodisperse poly(dimethyl siloxane). The molecular weights and the polydispersity indice were calculated. the chemical composition was extracted from proton NMR, which was recorded from Varian 500MHz instrument using $CDCl_3$ as solvent. The molecular weight of side block was calculated based on the molecular weight of center block and the chemical composition.

PDMS dicarbinol: Lot # P18218-DMS2OH



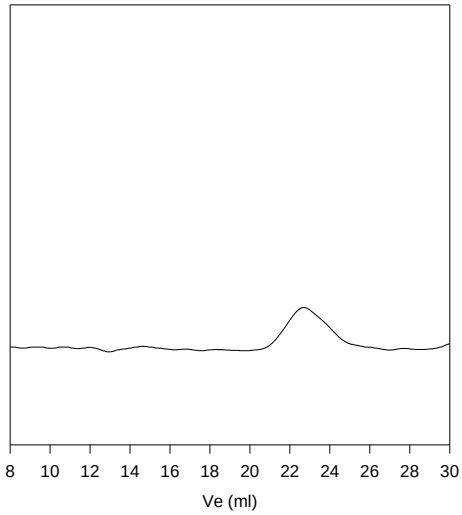


HNMR of Triblock copolymer



SEC of Homopolymer:

P18241B



Size Exclusion Chromatography in THF at 35 °C w.r.t PDMS standards.

M_n =7,200-b-3,000-b-7,200 PI=1.35

Reference:

1. J.X. Zhang, S.K. Varshney, "Simple Approach for the Scale-up Production of Block Copolymer of Polydimethylsiloxane with (Meth)acrylic Ester Monomers" Designed Monomers and Polymers, 2002, 1, 79.